

# Blue Ribbon Niche

## Objective

Students will identify different animals that live in a riparian area.

## Curricular Areas

Science (wildlife in the riparian zone), Language Arts (a class recording sheet, oral report about animal), Art (drawing, pasting and coloring), Social Studies (changes in the riparian area and effects on wildlife and community)

## California Content Standards

Science: K–Life 2, Earth 3, Investigation 4; 1<sup>st</sup>–Life 2, Investigation 4; 2<sup>nd</sup>–Life 2, Investigation 4

Social Science: K–4; 1<sup>st</sup>–1; 2<sup>nd</sup>–2, 4, 5

Language Arts: K–Written/Oral 1.0, Listening 1.0, 2.0; 1<sup>st</sup>–Written/Oral 1.0 Listening 1.0, 2.0; 2<sup>nd</sup>–Writing 1.0, 2.0, Written/Oral 1.0, Listening 1.0, 2.0

## Method

Students will create a representation of wildlife that lives in riparian areas. They will add these animals to the riparian habitat previously created in the “Riparian Retreat” lesson.

## Materials

- Art materials: crayons, scissors, paints, pencils and glue
- Paper for drawing
- Nature magazines or reproduced coloring book pictures

## Background

Riparian areas are found wherever streams or rivers at least occasionally cause flooding beyond their channels. These areas are an important and valuable habitat that supports a variety of plant and animal life. Each plant and animal has an important role in the riparian area. Some are predators, some prey. Some are producers, some consumers, and some decomposers. Some are herbivores, some carnivores, and some omnivores. The plants and animals in the riparian area are interdependent, with each species

contributing to the well-being of the overall system.

Riparian areas often provide a wide variety and great abundance of vegetation, along with a high-percentage of shade, humidity and diversity of animals and plants.

Riparian areas are both aquatic and terrestrial and are characterized by a diversity of life forms. For example, frogs are commonly found in areas of calm waters in riparian areas. Frogs are predators, once they mature beyond their algae-eating tadpole stages. They need moisture, sunlight and grasses or other vegetative shelter. Their eggs must be deposited in water that is permanent enough to allow a lengthy gestation period, growth into gilled tadpoles, and finally transformation into predatory, air-breathing frogs. Riparian areas are easily affected by natural and non-natural changes. For example, spring flooding and flash floods dramatically affect vegetation and wildlife. Excessive use of riparian areas by humans, livestock and wildlife can greatly modify riparian vegetation and destabilize the stream or riverbanks, causing increased rates of erosion. Development and recreational pressures also jeopardize these unique habitats. Riparian areas have aesthetic, ecological, scientific, social, economic, recreational and intrinsic value.

## Procedure

1. Review the concept of habitat and what a habitat provides: food, water, shelter and space in the proper arrangement to insure an animals survival.
2. Discuss that animals found in a riparian habitat are animals that need to live in or close to a body of water. Have the students pantomime the following poem.

### ***This is a Plant***

*This is a plant so tiny and small*

*It dances in the river's current spring, summer and fall*  
*But...*

*This is an insect flying in haste*

*Smelling the plant, she (he) stops for a taste*  
*But...*

*Here comes a fish and with its keen eye*

*She (he) sees the insect and silently swims close by*  
*But...*

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Continued

*Here sits a duck, a very patient squatter  
 She (he) gets ready to dive for the fish in the water  
 But...  
 Here comes an angler just looking things over  
 She (he) gives a whistle to her (his) big dog Rover  
 So...  
 The duck flies away  
 The fish swims low  
 The insect flies on  
 And the plant just grows.*

Explain that this poem talks about some of the animals in a riparian area.

3. Ask student to think of other animals that would live in a riparian habitat. Write the animals names on a class-recording sheet. This sheet will help when students are writing the name of their animal on its picture.
4. Talk about the riparian habitat that was made previously. Will it provide for the needs of the animals that live in the area? Is there anything that needs to be added?
5. Using the animal list made earlier, have students find magazine pictures, draw and color animals, or color and cut out reproduced coloring book pictures.
6. Allow time for all students to complete their animal representations. Have students place their animal in the riparian area and tell the name of the animal. Have older students share some of the characteristics of the animal.
7. After every student has placed their animal, have students discuss what would cause changes to take place in a riparian area. Consider how the change might affect the animals that live in the area. Change may be natural or created by humans. Examples of events that could cause change:

- removing trees that produces shade along the bank
- flooding caused by a winter storm
- discarded trash along the waterway
- planting grasses and shrubs along river bank that was bare
- draining to expand acres for building or farming
- moving livestock, people swimming, fishing or hiking
- planting trees to replace trees that have been cut down

8. Read the book *Once There Was a Wood*. Have the students discuss some things that humans can do to preserve the riparian areas and help wildlife survive.

## Extensions

1. Have students choose an animal found in a riparian area. They are to find out as much as they can about the characteristics of the animal and do an oral report to the class.
2. Consider ways that cities, a distance from a riparian area, may have a negative affect on the area through storm drain run off.
3. Identify animals that are predator and prey in a riparian area.

## Evaluation

- Have the students identify and talk about an animal that is found in a riparian area.
- Identify two ways that riparian zones could be affected in a negative way.
- Identify two ways that riparian zones could be affected in a positive way.